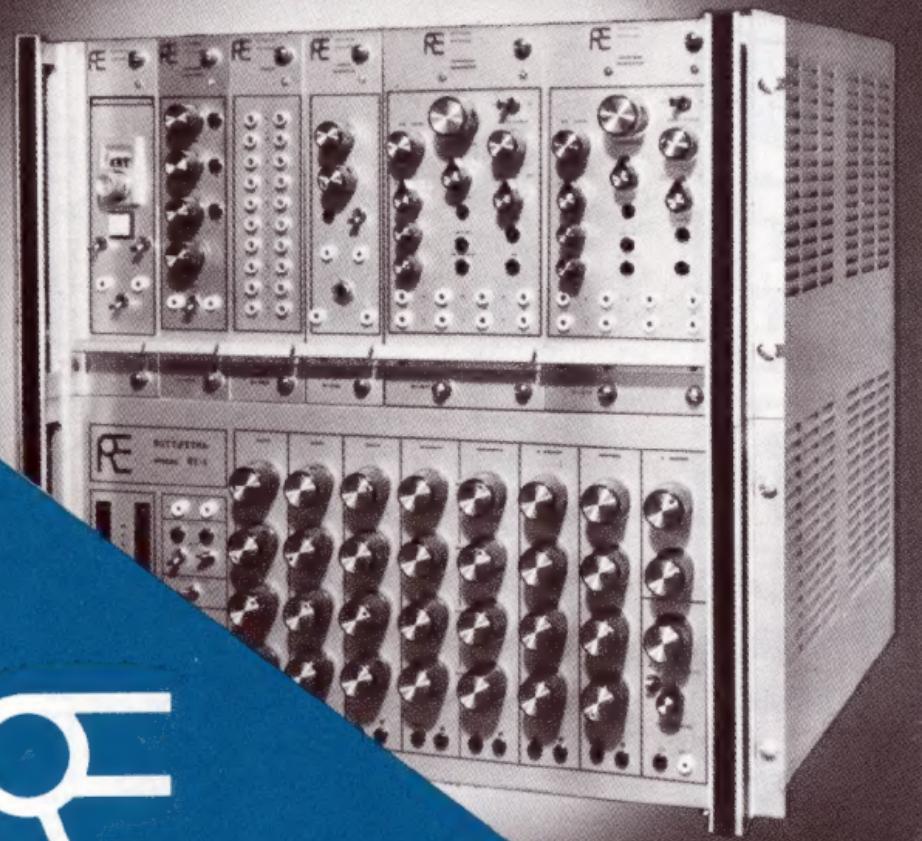
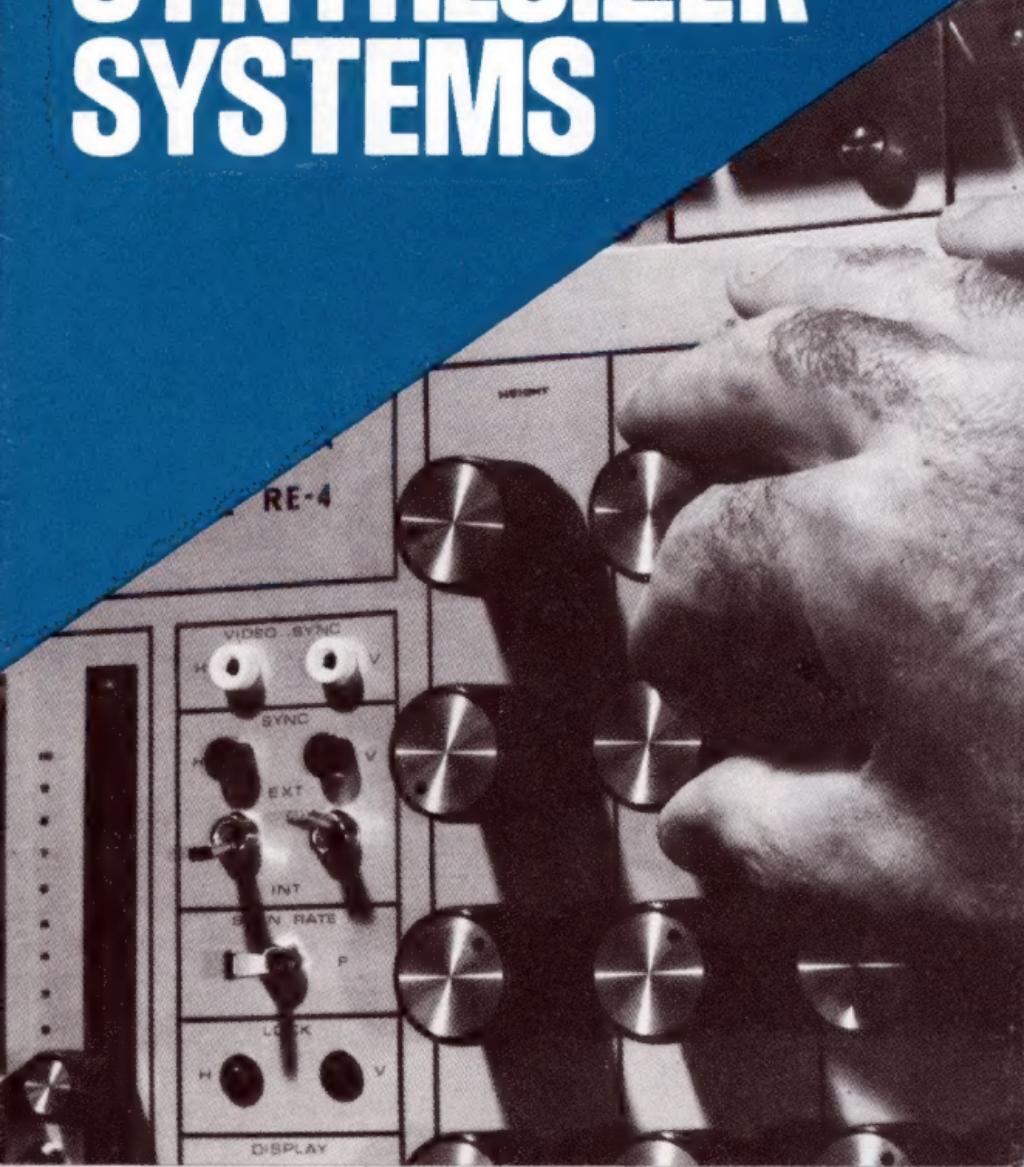




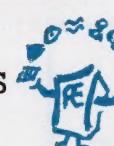
# VIDEO SYNTHESIZER SYSTEMS



# RUTT/ETRA VIDEO SYNTHESIZER

In minutes  instead of days  you can animate  images from flat art , a TV camera , videotape  or motion picture . The images can be in color  or black-and-white ... in high contrast  or continuous  tones. You can also generate within the synthesizer endless variations of abstract lines , forms  and patterns .

You can alter all – or parts – of image height , width , depth , shape , position , brightness , and movement . It is also possible for you to rotate images in two-dimensional  and three-dimensional  space.

Your pre-set animation and timing can be rehearsed  and then repeated automatically. Synthesizers can be equipped to animate many separate graphic elements  simultaneously.

Surpassing conventional TV effects generators  the R/E synthesizer generates key visual inserts of any desired shape  which you can reshape  and animate  without moving the original graphic or its pickup camera.

The synthesizer can also be controlled by outside events such as music , speech , bio-physical sensors , etc., reflecting non-visual  phenomena in graphic display .

Finally: the synthesized images are displayed on a high resolution kinescope  and picked up by a TV camera  to be fed into a videotaping  or broadcasting  system.



ORIGINAL GRAPHIC



## WELCOME TO THE WORLD OF VIDEO SYNTHESIS!

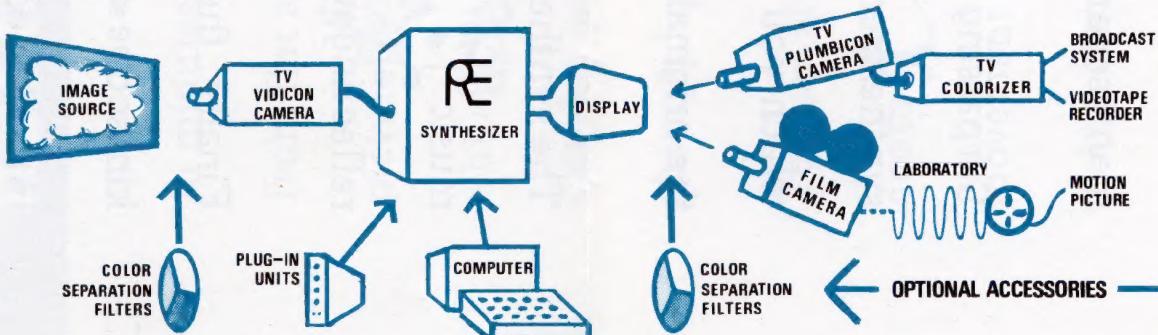
Video synthesis opens the door to a vast new world of dynamic visuals serving functional and artful purposes. It yields major economies in time, labor and materials required for title, graphics and background animation. Already attracting much attention in commercial TV program and advertising fields, it dramatically expands the horizons of experimental video art.

It realizes the dreams of audio-visual producers for a quicker, more economical way to manipulate TV and film images without resorting to cell animation.

Emerging from the early principles of video image manipulation used for radar in the '40s, expanded in video flight simulators of the '50s and in experimental video art of the '60s, the RUTT/ETRA VIDEO SYNTHESIZER represents engineering and cost-saving breakthroughs bringing this incredible facility within the financial grasp of many video and film producers.



The basic RUTT/ETRA VIDEO SYNTHESIZER is designed to accommodate components and accessories for initial or subsequent installation to fit the user's budget and changing objectives.



~~\$12999.00~~  
**RE-4-A Video Synthesizer - \$16,500.00**

## DISPLAY CONTROL UNIT

Two separate sets of control varying image:

**Height** Reduces to thin line; expands inverted image beneath. Rotates horizontally.

**Width** Varies and inverts. Rotates vertically.

**Depth** Advances and recedes.

**Vert. Position** Up-down on or off screen.

**Horiz. Position** R-L on or off screen.

**Intensity** Controls brightness.

**Horiz. Center** Moves image through preset patterns, ala words around theatre marquee.

**Vert. Center** Adjusts vertical axis.

Plus . . . **SCAN RATE** switch . . . **DISPLAY** 0°/90° rotating image 90° . . . **INT./EXT. SYNC.**

## ANIMATION CONTROL MODULES

**Summing Amplifier** Combines functions.

**Diode Module** Divides waveforms & timing ramps.

**Ramp Generator** Automatic control of animation at preset speed and period of time.

**Audio Interface** Drives animation with audio, bio-feedback or other external signals.

(2) **Waveform Generators** Produces graphic forms for display or for reshaping and animating images. Controls **frequency, waveshape, duty cycle, amplitude & Frequency modulation, sync.**

## DISPLAY UNIT (Type A)

Displays 525-line synthesized images.

~~\$24999.00~~  
**RE-4-B Video Synthesizer - \$16,500.00**

Similar to RE-4-A, but substitutes Type B DISPLAY (1050-line scan) yielding full NTSC resolution in rescanned image for two-inch hi-band videotape or direct telecast.

Manufactured by **RUTT ELECTROPHYSICS**

SEND FOR full details about RE systems, optional plug-in units and accessories.

## SOLE DISTRIBUTOR



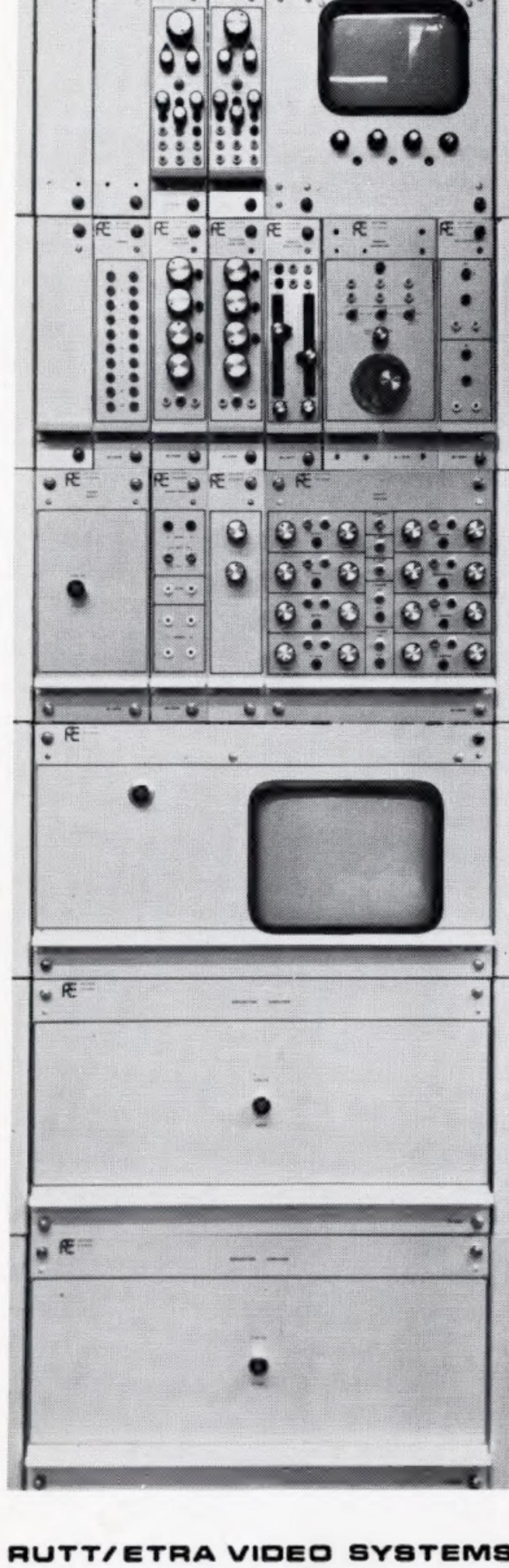
**MPCS COMMUNICATIONS INDUSTRIES, INC.**

424 West 49th St., New York 10019

(212) 586-3690



**RUTT/ETRA  
SYNTHESIZER**



**RUTT/ETRA VIDEO SYSTEMS**  
DIVISION OF RUTT INSTRUMENTS CORP.

**27 WEST FOURTH STREET  
NEW YORK, N.Y. 10012**